



State of Utah

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Environmental Quality

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DAQ-073-05

MEMORANDUM

**TO:** Air Quality Board

**THROUGH:** Richard Sprott, Executive Secretary

**FROM:** Colleen Delaney, Environmental Scientist  
Jim Schubach, Environmental Engineer

**DATE:** October 18, 2005

**SUBJECT:** Propose for Public Comment: Repeal and Re-enact of R307-401, *Permits: New and Modified Sources*; Proposed Repeal of R307-413, *Permits: Exemptions and Special Provisions*; Amend R307-101-2; *Definitions*; and Amend R307-325, *Davis and Salt Lake Counties and Ozone Nonattainment Areas: Ozone Provisions*

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The Board is considering a proposal to adopt changes to the Prevention of Significant Deterioration (PSD) program in a separate agenda item. That proposal would incorporate the federal PSD permitting program by reference rather than repeating the requirements in Utah's rules. Some of the provisions of the PSD program are currently located in R307-401, *Permits: New and Modified Sources* and need to be removed to avoid redundancy. We took this opportunity to take a critical look at R307-401 to ensure that the provisions were effective and were achieving the desired results. As a result of this review, we recommend making some additional changes to R307-401.

There are several documents attached to this memo. The first document with the header "To REPLACE Existing R307-401" shows the proposed new language for R307-401. The second document with the header "TO BE DELETED" shows the existing language in R307-401. The third document with the header "TO BE REPEALED" shows the old language for R307-413 that has been moved into R307-401. We were not able to develop a strikeout underline version that

would be useful to show the changes to the rule because so many provisions had been moved to a new location. The changes are described in detail below to help the reader understand the changes that have been made to the rule and the attached documents can be used as a reference to compare the new and the old language.

### **Better Distinction Between Federal and State Requirements**

1. R307-413 contains exemptions and special provisions for Utah's permitting program for new and modified sources. These provisions are intended to apply only to the state permitting program in R307-401, and do not affect the criteria for the PSD and nonattainment area (NAA) New Source Review (NSR) permitting programs. This has been an on-going source of confusion for sources. These exemptions and special provisions have been moved into R307-401 (see sections R307-401-9 through 12 and R307-14 through 16 in the proposed rule), and a purpose statement was added to clarify that the PSD and NAA NSR permitting programs establish independent requirements.
2. Language that applies only to major sources under the PSD program has been removed from R307-401 because these requirements are now incorporated by reference into R307-405 (see separate agenda item). This change will help to clarify what applies to major sources, and what applies to all sources in the general permitting rule.

### **Requirements that Belong in Another Rule**

1. In the past, all of the definitions used in the rules were located in one place. This has led to confusion when commonly used terms were given specific definitions that did not apply in all cases. Our current policy is to include definitions in the rule where the definition is used, unless the same definition is used in multiple rules. The terms "indirect source" and "best available control technology" are used only in R307-401. These terms have been moved to R307-401.
2. When the Ozone Maintenance Plan was adopted in 1995, a contingency measure was added that, if triggered, would require existing sources to install low-NO<sub>x</sub> burners. This requirement was added to R307-401-10 because that rule requires the use of low-NO<sub>x</sub> burners in new or modified sources. In retrospect, this provision is better located with the ozone nonattainment and maintenance area general provisions in R307-325 because it is not a permitting requirement. This provision has been moved to R307-325.
3. Conversely, R307-325-3 requires that any Best Available Control Technology (BACT) determination in an ozone nonattainment or maintenance area must be at least as stringent as Reasonably Available Control Technology (RACT). Sources that are looking at the permitting rules may not be aware of this requirement. We recommend moving this provision to R307-401.
4. Finally, R307-401-8, *Nonattainment and Maintenance Areas*, and R307-401-9, *Relaxation of Limitations*, apply to major sources in nonattainment areas. These requirements should be located

in R307-403, *Permits: New and Modified Sources in Nonattainment Areas and Maintenance Areas*. We anticipate that R307-403 will undergo a major rewrite in the near future to incorporate the NSR Reform provisions in the federal NAA NSR rule that are similar to the changes in the PSD rule. The rule will also need to be revised to include the permitting requirements for the federal health standards for ozone and PM<sub>2.5</sub>. EPA has not yet finalized these requirements for nonattainment areas; therefore, we recommend leaving these provisions in R307-401 temporarily, and then moving the requirements to R307-403 as part of the major rewrite.

### **Requirements that Are Not Achieving the Intended Purpose**

1. R307-413-2 provides an exemption for de minimis sources. The exemption is not allowed for any source that is covered by a New Source Performance Standard (NSPS) or a National Emission Standard for Hazardous Air Pollutants (NESHAP). There are some small sources, such as dry cleaners, that are covered by an NSPS or NESHAP. There is no added value to require these sources to obtain an approval order. The NSPS or NESHAP requirements apply independently, and provide a good mechanism to regulate these small sources. The rule (see R307-401-9 in the proposal) has been revised to allow these small sources to qualify for the small source exemption.
2. R307-413-2 (2) requires small sources that are exempted from the approval order process to register with the executive secretary if they are located in a nonattainment or maintenance area. This provision was added to help keep track of these sources so that they could be included in the State Implementation plan (SIP) development process. This requirement has been in place for a number of years. We have not needed to use this registry during the development of recent SIPs, and do not see the need for maintaining this registry for that purpose. Compliance inspectors, however, use the registry to help identify sources that qualify as de minimis. We recommend modifying the requirement to make the registry voluntary and to expand the registry statewide. Sources that are not obviously de minimis will have an incentive to be included in the registry to avoid unnecessary compliance scrutiny, while other sources will not face the burden of a mandatory requirement that does not provide any real benefit.
3. R307-413-3 was intended to allow flexibility for existing sources to make small changes to their operations without requiring an approval order (AO). In practice, this rule has applied to very few changes, and has routinely been misinterpreted. We recommend deleting this rule. We are committed to the concept of making approval orders flexible and have been accomplishing this goal without relying on the provisions of R307-413-3. Approval orders are written to allow changes that do not affect the BACT determination. In addition, the expansion of the Reduction in Air Contaminants exemption (see item 6 below) achieves much of the same effect because any change that reduces emissions will be exempted from the requirement to obtain an AO. We believe that this is a better approach for providing flexibility.
4. R307-413-4 (5) provides an exemption for smaller parking lots, leading to the assumption that larger parking lots must be permitted. We do not currently permit parking lots. Transportation planning organizations and local zoning requirements are the best entities to address traffic flow

patterns and possible congestion that could be created by new parking lots. We recommend deleting this provision.

5. R307-413-4 (6) contains an exemption from the approval order requirement for emissions of various pollutants. This exemption is a relic from an earlier definition of the term “volatile organic compound (VOC)” that exempted a list of organic compounds that were determined to not be photochemically active. The exemption has not been modified over the years to reflect the ever-changing list of compounds in the definition of VOC. In addition, some compounds that are not photochemically reactive may still be of concern for their effects as hazardous pollutants. We recommend removing this exemption from the rule.

6. R307-413-6, *Reduction in Air Contaminants*, provides an exemption from the approval order requirement for changes that reduce emissions. In practice, very few changes have qualified for this exemption because of the narrow way that applicability was defined. We recommend expanding the provisions of this rule to provide an exemption for any type of change that would reduce emissions, including fuel switching or the installation of air pollution controls (see proposed section R307-401-12). The rule would continue to limit the exemption to changes that reduce emissions of all air contaminants. We believe that changes that reduce one pollutant and increase another pollutant should still be evaluated to ensure that the emission increase does not cause a new problem in the area.

7. R307-401-6 (3) requires approval by the Board for any major source or major modification that consumes more than 50% of the available increment under the Prevention of Significant Deterioration program. This provision was intended to alert the Board to potential restrictions on new source growth in areas where the increment has been consumed. However, in practice, this provision has created confusion whenever a proposed AO is brought to the Board because it is not clear what would happen if the Board did not approve an AO that had met all of the specified conditions of the rule. In addition, in areas where increment has already been consumed, a small change could potentially consume 50% of the remaining increment and these changes do not warrant review by the Board. We recommend removing the requirement from the rule, and addressing the concerns about future growth through other mechanisms.

## **Clarifications**

1. The replacement-in-kind requirements in R307-413-5 (see R307-401-11 in the proposed rule) have been expanded to better match the requirements in the PSD rule. In addition, the rule has been modified to clarify that process equipment can qualify for the replacement-in-kind rule. The rule currently refers to replacement of any control apparatus. The expanded requirements better explain how to determine if a replacement qualifies for this exemption, and reflects our interpretation of the current requirements in R307-413.

2. Some general clean up of the rule language was done to improve clarity and to better conform to state rule-writing conventions. In addition, some changes were made to the rule to better explain our current implementation of the rule. For example, language was added to clarify that a

BACT analysis must be included in the notice of intent (see R307-401-5 in the proposal). In practice, this is already done by most sources because this analysis is necessary to justify the proposed source or modification. When the analysis is not included up-front, UDAQ permit engineers must spend time requesting additional information from the source to complete this analysis, thereby delaying the project.

**Staff Recommendation:** We recommend that the following changes be proposed for public comment: repeal and re-enactment of R307-401, repeal of R307-413, and amendment of R307-101-2 and R307-325, as displayed in the attached documents.